

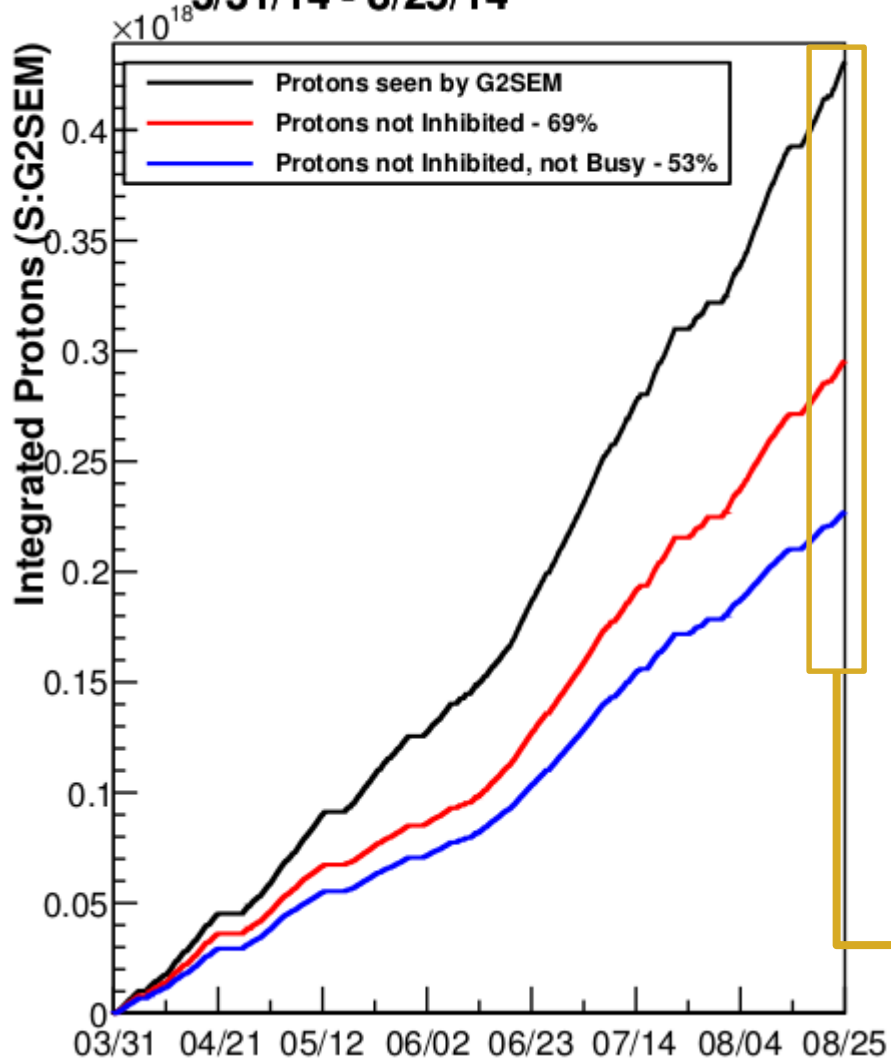
SeaQuest Status

Aug 18 - Aug 24

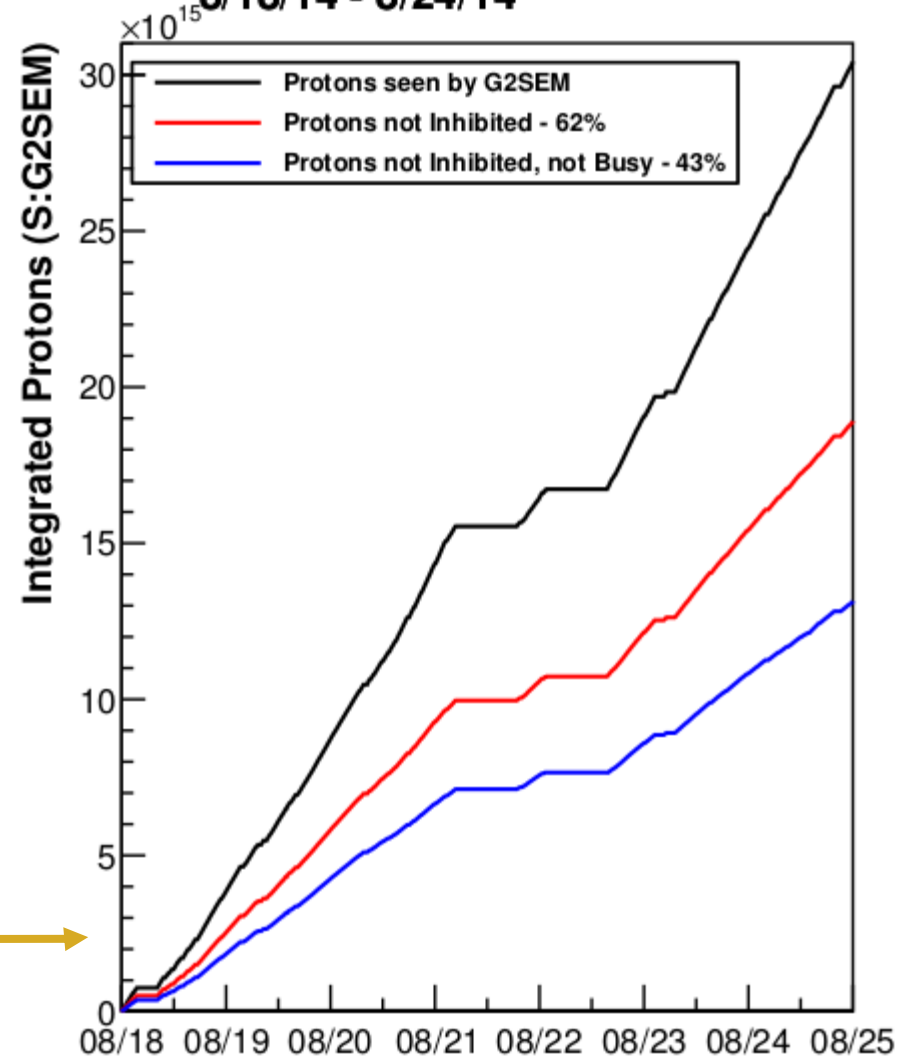
Brian Tice

Aug 25, 2014

SeaQuest Integrated Protons 3/31/14 - 8/25/14



SeaQuest Integrated Protons 8/18/14 - 8/24/14



Detector Status - All systems performing well

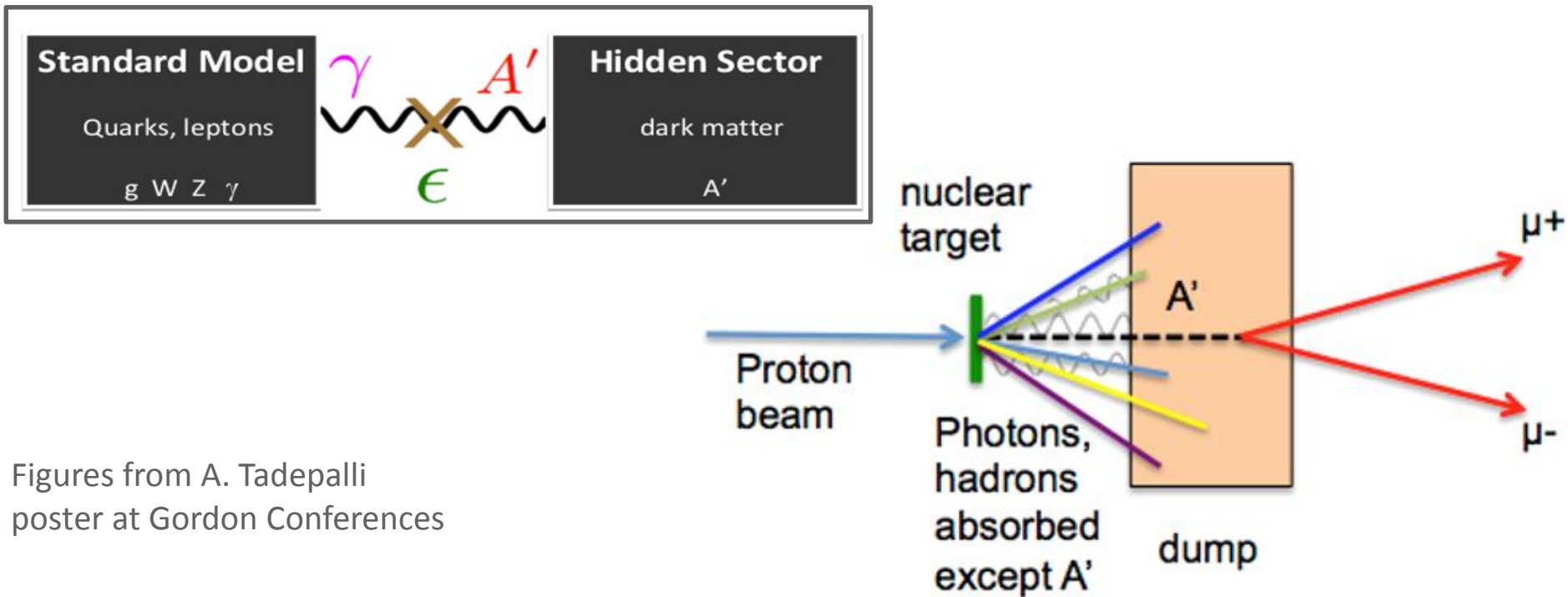
- New wire chamber unpacked at Lab 6, had **minor damage** during shipping
 - 40 wires to repair (6 from shipping damage) – does not delay installation
- Chamber to be installed at Station 1 (most upstream) during shutdown next month



Target Status - No target issues

Trigger Update - Improved sensitivity to dark photons

- Added 5 additional trigger roads to existing list
 - 5 roads are predicted to be high efficiency for triggering on dark photons (if any)
 - Did not noticeably change trigger rate



Figures from A. Tadepalli
poster at Gordon Conferences

Beam Status - **Consistently better**, when consistent

- Beam toggled between turn13=3 and 4
 - Tuning at 4 dropped switchyard permit due to high radiation
 - Switched to 3 turns for tuning, then back to 4 turns
- Prefer 4 turns to 3 so we get more live beam, but...
 - Tuning at 4 turns can result in dangerous intensity in our detector
 - Tuning at 3 turns is appreciated as it may bring further improvements
 - Stability is crucial

Beam Status - UNSER monitor connected

- UNSER monitor, a fast current transformer, in NM3 was connected to lock-in amp
 - Will give absolute calibration of beam intensity just US of targets
 - First test shows it is correctly synced to beamline rf

